**In the Claims**

1. (Previously presented) A process for the regulation of the composition of solution(s) for the manufacture of cellulosic mouldings, comprising:

(a) mixing cellulose pulp and water containing aminoxide to form a cellulosic suspension in a mixing apparatus equipped with metering elements;

(b) moving the cellulosic suspension from the mixing apparatus to a first evaporation device and evaporating water from the cellulosic suspension to form a cellulose solution;

(c) moving the cellulose solution from the first evaporation device to an extruding device and measuring a non-optical property of the cellulose solution for adjusting concentrations of the cellulosic suspension by means of the metering elements in stage (a) and/or the cellulose solution in the evaporation device of stage (b);

(d) extruding the cellulose solution through an air gap into a precipitation bath, which contains an aqueous aminoxide solution wherein the cellulose solution coagulates to form mouldings and removing at least some of the aqueous aminoxide solution from the precipitation bath to a second evaporation device for evaporating to a predetermined aminoxide concentration for reintroduction into the mixing apparatus;

(e) introducing and conducting the formed mouldings through a washing bath wherein an aqueous washing solution washes out remaining aminoxide from the mouldings; and

(f) moving at least some of the aqueous aminoxide solutions from the washing bath stage (e) and measuring a non-optical property therein before the aqueous aminoxide solution is reintroduced into the precipitation bath, and wherein the measured values of the non-optical properties are used for regulating the composition of the measured solutions according to the deviation of the measured value of at least one non-optical property from a given reference value for a reference-composition wherein the measured non-optical property of the solution is selected from the group consisting of: dielectricity constant, inductive conductivity, microwave absorption, density, water content and ultrasonic speed.

2. (Previously presented) The process according to claim 1, wherein the temperature of the solution is measured at or shortly before or after the measurement of the non-optical property and the measured value for the non-optical property is compensated on the basis of the measured temperature.

3. (Previously presented) The process according to claim 1, wherein the non-optical property is measured in-line.

4. (Currently amended) The process according to claim 1, wherein adjustments are made to the components of the solutions in stage (a), (d), or (e) ~~(e), or (d)~~.

5. (Previously presented) The process according to claim 1, wherein adjustments are made to the operating conditions in the evaporation device of stage (b) and/or (f) for the regulation of the composition of the solutions.

6. (Previously presented) A device used for the regulation of the composition of solution(s) for the manufacture of cellulosic mouldings, comprising:

a mixing apparatus containing at least two metering elements for introduction of composition components;
a dissolving and evaporation device communicatively connected to the mixing apparatus;
an extrusion device communicatively connected to the dissolving and evaporation device;
a precipitation bath downstream of the extrusion device and separated therefrom by an air gap;
at least one washing bath downstream from the precipitation bath;
a line connected between the washing bath and at least one of the metering devices, wherein the line further comprises a return evaporator;
a plurality of measuring devices for the measurement of a non-optical property and arranged to communicate with metering elements, the evaporator device and/or return evaporator via at least one regulation circuit for the regulation of the composition of the solutions contained in the mixing apparatus, the dissolving and evaporation device and/or the precipitation bath.

7. (Previously presented) The device according to claim 6, wherein the device further comprises a temperature measuring device for measuring the temperature of the solution and for compensating the measured values of the measuring device according to the temperature.

8. (Previously presented) The process according to claim 2, wherein the non-optical property is measured in-line.

9. (Currently amended) The process according to claim 1, wherein the solution from step (e) ~~(d)~~ is concentrated before the non-optical property is measured.

10. (Currently amended) The process according to claim 3, further comprising measuring the temperature of the solutions of steps (d) ~~(c)~~ and/or (e) ~~(d)~~ at a time selected from the group consisting of: [;] before the measuring of the non-optical property, after the measuring of the non-optical property, and at approximately the same time as measuring the non-optical property, and wherein the measured value is compensated on the basis of the measured temperature.

11. (Previously presented) The device of claim 6, further comprising a return line from the washing bath connected to the precipitation bath.

12. (Previously presented) The device of claim 11, further comprising a measuring device positioned between the washing bath and precipitation bath.

13. (Previously presented) The device of claim 7, wherein the measuring device measures a measurement selected from the group consisting of: a dielectricity constant, inductive conductivity, microwave absorption, density, water content and ultrasonic speed.

14. (Previously presented) The device of claim 13, wherein each measuring device is measuring a different property.

15. (Currently amended) The process according to claim 1, wherein the aqueous aminoxide solutions from stage (d) and (e) ~~(c) and (d)~~ are measured for a non-optical property.

16. (Previously presented) A process for the regulation of the composition of solution(s) for the manufacture of cellulosic mouldings, comprising:
(a) mixing cellulose pulp and a water containing aminoxide to form a cellulosic suspension;
(b) evaporating water from the cellulosic suspension to form a cellulose solution;
(c) extruding the cellulose solution through an air gap into an precipitation bath, which contains an aqueous solution wherein the cellulose solution coagulates to form mouldings;
(d) conducting the formed mouldings through an aqueous washing solution in which remaining aminoxide is washed out from the mouldings; and

(e) removing at least some of the aqueous solutions from stage (c) and (d) for measuring a non-optical property and for regulating the composition of the measured solutions according to the deviation of the measured value of at least one non-optical property from a given reference value for a reference-composition wherein the measured non-optical property of the solution is selected from the group consisting of: dielectricity constant, inductive conductivity, microwave absorption, density, water content and ultrasonic speed.